Remarks/Arguments

Claims 1-17 remain in the application. Claims 18-21 have been withdrawn from consideration. Claim 8 has been amended.

Claims 1-8 were rejected under 35 U.S.C. Section 103 as being unpatentable over Pakeriasamy, U.S. Patent No. 5,857,573 in view of Martin, et al., U.S. Patent No. 5,875,892. In addition, Claims 9-17 were rejected based on Pakeriasamy in view of Martin and further in view of Kitamura, et al., U.S. Patent No. 5,295,297. The applicants respectfully traverse each of these rejections.

Discussion

The applicants have discovered a new and unique packaging container for electronic components, particularly integrated circuits, which includes a tray into which the integrated circuits are secured, a tray cover which is secured over the tray and preferably a humidity indicating device incorporated into the tray cover. The invention may also include a moisture-proof barrier bag into which the packaging container tray is placed. Each of these components may be produced from different types of components. For example, the tray is preferably produced from a conventional, water impermeable plastic material and the humidity indicating system is comprised of a group of components, the outside cover of which is preferably covered with a water impermeable layer. In contrast,

the tray cover is preferably composed of a different composition from that of the tray or the humidity indicating system and requires the following components: a plastic material, an electrostatic dissipating product, and a desiccating material. The composition of this tray cover is distinctive from the composition of any packaging component that is disclosed in any of the references cited and is not obvious over the combination of the components cited in the references.

To understand the distinction between the composition of the tray cover, as claimed, and the composition of the products disclosed in the cited prior art, it is necessary first to review the composition of the devices disclosed in the prior art.

Pakeriasamy

Pakeriasamy discloses a conventional tray for shipping a particular type of electronic card, a PCNCIA card. The improvement in the Pakeriasamy device is that the PCNCIA cards can be directly placed within the trays of the container without being first placed within a Jewel case. The composition of the container for the PCNCIA cards and its cover includes only conventional plastic materials, such as polyvinyl chloride, polycarbonate or polyethylene. (Column 3, lines 51-55) Incorporated into the plastic material may be a material which renders the tray not

subject to static. (Column 3, lines 56-58) However, Pakeriasamy does not disclose as a potential component in this composition any material which would absorb moisture on the PCNCIA cards that are placed in the tray or moisture present within the tray itself. The Examiner acknowledges this fact by stating that "Pakeriasamy '573 does not appear to disclose the container having a moisture-absorbent composition material and a humidity indicator device." Accordingly, the Examiner acknowledges that this key component of the tray cover of the invention is not disclosed or suggested by Pakeriasamy.

Martin, et al.

To disclose this critical element of the composition of the tray cover of the invention, the Examiner cites Martin, et al. The Examiner asserts that "Martin '892 discloses a packaging container for integrated circuits where the composition of the packaging material is moisture and water vapor proof and provides electrostatic discharge protection," and asserts that it would have been obvious to combine Martin, et al. with Pakeriasamy to disclose that the composition of the tray cover includes "a moisture-absorbent material." The applicants assert that the combination of these references does not disclose or suggest the invention, as claimed.

To understand the disclosure of Martin, et al., it is first important to review the product that is disclosed by Martin, et al. Martin, et al. discloses a packaging container (10) with a humidity indicator element (12) incorporated into an opening (18) in the packaging (10). This humidity indicator element (12) was the key feature of this invention over the prior art. The applicants acknowledge that the humidity indicator element (12) which is disclosed in Martin, et al. is similar to the humidity indicator device that is claimed in the claims of the application.

However, Martin, et al. does not disclose or suggest that the composition of the tray cover, must or even may include a "desiccating material for absorbing moisture..". In fact, Martin, et al. teaches the use of an entirely different mechanism for removing moisture from the space within their packaging container.

Specifically, Martin, et al. teaches the use of a conventional "moisture and water vapor proof" (Column 3, lines 39-41) packaging container into which conventional desiccant packets or bags are placed to absorb the water within the packaging container. As stated in the discussion of prior art in Martin, et al. to describe the current state of the art,

> Currently the preferred method to form a packaging system for integrated circuits includes baking the integrated circuit devices until dry, placing them into a water and humidity proof packaging bag which contains desiccant

packets and a humidity indicator card, sealing the bag immediately and then shipping the device to the customer in those packaging bags. Column 1, lines 24-30

Martin, et al. merely taught a conventional process for removing moisture from a packaging container for integrated circuits by use of desiccant bags. Martin, et al. disclosed a conventional "moisture and water vapor proof" packaging container (10). (Column 3, line 40) Into this packaging container was placed the integrated circuit and a desiccant bag or bags. (Column 3, lines 29 and 49, Column 5, lines 2-3 and Column 6, lines 37-39) This is the type of system which the applicants have eliminated by use of their new composition for a tray cover.

While the prior art, including Martin, et al., taught that desiccant bags should be used to solve this problem, there are a number of problems created when such desiccant bags are used, including: (1) dust from the desiccant could damage the ICs, (2) moisture could still be present within the container which was not absorbed by the desiccant bag, (3) because the desiccant bags were bulky and not flat, stacking problems for the containers were created, and (4) the amount of space within the containers was limited and valuable storage space was sacrificed to accommodate the desiccant bags. All of these problems were addressed by the invention and none were addressed by Martin, et al.

Thus, neither Pakeriasamy nor Martin, et al. teach or suggest that a packaging container for electronic components should be made of a composition which includes a desiccating material. In fact, Martin, et al. teaches that including such a composition in the packaging container itself is unnecessary to solve the problem of moisture within a container. Instead, Martin, et al. teaches the conventional usage of a desiccant bag which is placed within the container. Thus, the composition which is claimed by the applicants is entirely different from the composition that is taught or suggested by Martin, et al. or Pakeriasamy.

In addition, it cannot be argued that it would have been obvious to one skilled in the art to have produced a container which included a desiccating material in its composition as that is the opposite of what is taught by Martin, et al. alone or in combination with Pakeriasamy.

In determining whether an obviousness rejection is appropriate, the United States Federal Circuit utilizes the "suggestion" test as outlined, for example, in In re: Kotzab, 55 U.S.P.Q.2d 1313 (Fed. Circuit, 2000), wherein the Court overturned a determination of obviousness by the Board of Patent Appeals and Interferences. In that case as in this case, the Examiner had concluded that an invention was merely a combination of old elements. (In fact, the basis of the rejection in that case was

stronger than in the present case. In that case the Examiner was able to find each of the claimed elements in the prior art. In this case, the key element, i.e., the use of the desiccating material in the composition of the tray cover, is not even disclosed by any references that are cited.)

> ...to establish obviousness based on a combination of elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant .... Even when obviousness is based on a single reference, there must be a showing of a suggestion or a motivation to modify the teaching of that reference .... In re: Kotzab, id.

It is clear that there is no motivation provided by either of the cited references to change the composition of the container which holds the electronic components to include the moisture absorbing material that is claimed in the application. In fact, Martin, et al. teaches that the problem of humidity is best addressed by the use of desiccant packets placed within a container, the composition of which is moisture impermeable. Thus, Martin, et al., in fact, teaches away from the solution proposed by the applicants to solve this problem.

Even if, the disclosures cited by the Examiner suggested to a person skilled in the art that he might experiment or try other combinations of products to produce a better product, this "suggestion to experiment" is not sufficient to satisfy the

standard for an obviousness rejection by the USPTO. In re: Geiger, 2 U.S.P.Q.2d 1276, 1278 (Fed. Cir. 1987) ("At best, in view of these disclosures, one skilled in the art might find it obvious to try various combinations of these known scale and corrosion prevention agents. However, this is not the standard of 35 U.S.C. Section 103.") See also In re: Dow Chemical, 5 U.S.P.Q.2d 1529, 1532 (Fed. Cir. 1988) (The PTO presents, in essence, an "obviousness to experiment" standard for obviousness. However, selective hindsight is no more applicable to the design of experiments than it is to the combination of prior art teachings. There must be a reason or suggestion in the art for selecting the procedure used, other than the knowledge learned from the applicant's disclosure.)

Accordingly, it is clear from a detailed review of Pakeriasamy and Martin, et al. that it would not have been obvious to prepare a packaging container for integrated circuits, wherein the tray cover for that container is produced from a material which includes a desiccating material.

Kitamura, et al.

The applicants also do not believe that Kitamura, et al., U.S. Patent No. 5,295,297 adds any additional disclosure to Pakeriasamy and/or Martin, et al. as Kitamura, et al. was cited merely to

disclose the use of a water and moisture proof barrier bag. Even adding the disclosure of Kitamura, et al., the combination of references still lacks the disclosure of a tray cover manufactured from a material which includes a desiccating material, as claimed by the applicants in all claims of the application.

CONCLUSION

The applicants believe that all claims of the application are allowable over the prior art and requests that a Notice of Allowance be issued.

Attached hereto is a marked up version of the changes made to Claim 8 as Exhibit A.

Respectfully submitted,

Scott R. Cox
Reg. No. 31,945
LYNCH, COX, GILMAN & MAHAN, P.S.C.
400 West Market Street, Suite 2200
Louisville, Kentucky 40202

CERTIFICATE OF SERVICE

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims

Claim 8 has been amended as follows:

8. (Amended) The packaging container of Claim 2 wherein the humidity indicator device is secured to the tray cover using a clear, plastic disk mounted within ~~the~~ an opening in the tray cover.